

WHAT IS CLAIMED IS:

1. A magnetic sensor comprising a magnetoresistance effect element that contains a pinned layer and a free layer, said magnetoresistance effect element having a resistance value that changes in accordance with a relative
5 angle formed by a magnetization direction of the pinned layer and a magnetization direction of the free layer, said magnetic sensor being formed in such a manner that a plurality of said magnetoresistance effect elements are provided on a single chip, and the pinned layers of at least two of said plurality of magnetoresistance effect elements have magnetization directions
10 that cross each other.